

Applicants: Taylor et al.
Serial No. 09/827,252
Attorney Docket No.: 39262/256238

AMENDMENTS TO THE CLAIMS

Kindly make the following amendments to the Claims:

Kindly cancel Claims 15 through 35 without prejudice.

Kindly add new Claims 36 through 48 as listed below.

36. (new) An orthopaedic spatial fixation system, comprising a plurality of arcuate shaped fixation plates, wherein each plate comprises a plurality of attachment points, at least some of the attachment points being in sets of three attachment points, the three attachment points in a set being spaced substantially 120 degrees apart from each other along an arc of the fixation plate; wherein the plates are adapted to be connected to each other with a plurality of attachment structures such that at least one of the attachment structures connecting two of the plates is not substantially parallel to at least one other of the attachment structures connecting the same two plates, the number of attachment structures being at least six and a multiple of 3, whereby rotating a first one of the fixation plates substantially 120 degrees from a starting position in a plane substantially parallel to another one of the fixation plates causes the first fixation plate to present the same geometrical arrangement of attachment points to the attachment structures as the geometrical arrangement of attachment points presented to the attachment structures when the first fixation plate was in the starting position.

37. (new) The orthopaedic spatial fixation system of Claim 36, whereby rotating the first fixation plate substantially 60 degrees from the starting position in a plane substantially parallel to another one of the fixation plates presents the same geometrical arrangement of attachment points to the attachment structures as the

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geometrical arrangement of attachment points presented to the attachment structures when the first fixation plate was in the starting position.

38. (new) The orthopaedic spatial fixation system of Claim 36, wherein the number of attachment points is a multiple of six, providing 2x3 symmetry.

39. (new) The orthopaedic spatial fixation system of Claim 36, wherein at least one of the fixation plates is ring shaped.

40. (new) The orthopaedic spatial fixation system of Claim 36, wherein the plurality of attachment points are positioned such that in use, at least some of the attachment points on one of the plates move into alignment with at least some of the attachment points on another plate as adjustment is effected.

41. (new) The orthopaedic spatial fixation system of Claim 36, wherein the attachment points are positioned along an arc of α° of a circle defined by a diameter d , and the chord length between adjacent attachment structures is substantially equal to l , and the defined relationship comprises

$$d \approx l \left(\sqrt{\frac{1}{\tan^2\left(\frac{\alpha}{2n}\right)} + 1} \right)$$

42. (new) The orthopaedic spatial fixation system of Claim 36, wherein the orthopaedic spatial fixation system is adapted to be positioned on a patient.

43. (new) The orthopaedic spatial fixation system of Claim 36, wherein the attachment structures comprise six adjustable struts, a first end of each of the struts connected to one of the attachment points on one of the fixation plates and a second

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end of each of the struts connected to one of the attachment points on another one of the fixation plates, wherein the attachment points connected to struts are each connected to two struts.

44. (new) The orthopaedic spatial fixation system of Claim 36, wherein the attachment structures comprise six adjustable struts, each strut connected at a first end to one of the attachment points of one of the fixation plates and each strut connected at a second end to one of the attachment points of another one of the fixation plates, wherein each attachment structure that is connected to a strut is only connected to one strut.

45. (new) An orthopaedic spatial fixation system, comprising a plurality of fixation plates wherein each plate comprises a plurality of attachment points, at least some of the attachment points being in sets of three attachment points, the three attachment points in a set being space substantially 120 degrees apart from each other along an arc of the fixation plate; wherein the plates are adapted to be connected to each other with a plurality of attachment structures such that at least one of the attachment structures connecting two of the plates is not substantially parallel to at least one other of the attachment structures connecting the same two plates, the number of attachment structures being at least 6 and a multiple of 3, whereby rotating the first fixation plate substantially 120 degrees from a starting position in a plane substantially parallel to another one of the fixation plates presents the same geometrical arrangement of attachment points as the geometrical arrangement of attachment points presented to the attachment structures when the first fixation plate is in the starting position.

46. (new) The orthopaedic spatial fixation system of Claim 45, further comprising an accessory adapted to be attached to one or more of the fixation plates.

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47. (new) The orthopaedic spatial fixation system of Claim 45, wherein the orthopaedic spatial fixation system is adapted to be positioned on a patient.

48. (new) The orthopaedic spatial fixation system of Claim 45, wherein the attachment structures comprise six struts, a first end of each of the struts connected to one of the attachment points on one of the fixation plates and a second end of each of the struts connected to one of the attachment points on another one of the fixation plates, wherein the attachment points connected to struts are each connected to two struts.